PDR RID Report

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Document FOS Design Specification and FOS Database Design and Database Schema Specifications

Section 4.5.3.1, section F, number 2 **Page** 4-43

Figure Table NA

RID ID **PDR** 83
Review FOS
Originator Ref MDK2
Priority 2

Category Name Interfaces, Design **Actionee** HAIS

Sub Category

Subject Router to Ecom Goes Down

Description of Problem or Suggestion:

If Ecom configures the backup router with its own identity, FOS will NOT have to reconfigure its routing tables in the devices that need to talk TO Ecom.

Originator's Recommendation

If the FOS systems follow the ICD with Ecom and implement and support the ICMP protocol, there will be no need for human intervention to reconfigure the FOS devices. The reconfiguration is taken care of by the use of the ICMP protocol. If the primary Ecom router goes down, then the FOS end systems will receive a IP re-direct packet from the other router telling them to use the secondary Ecom router. This is done with the network/link layer protocols (ICMP). The FOS devices that need to talk TO Ecom should implement and support the ICMP protocol.

GSFC Response by: **GSFC Response Date**

HAIS Response by: D. Herring **HAIS Schedule** 1/20/95

HAIS R. E. M. Armstrong **HAIS Response Date** 1/20/95

FOS devices will support ICMP. However, ICMP is used by the current router for a particular destination (in this case the destination is EDOS) to redirect a host to use another router. The recommendation described in this RID is for the secondary router to notify FOS devices that it (itself) should be used because the primary is unavailable. 4.4BSD Unix, and most of its derivatives, will accept ICMP Redirects only from the current router it is using. In the RID scenario, the current (primary) router will be down, so it will not be able to send an ICMP Redirect. If the secondary router sends the Redirect, the FOS host will ignore it. Additionally, COTS devices may not provide this type of functionality (i.e., having a backup router redirect a host to use the backup router itself in the event of a primary router's demise).

Thus, some reconfiguration may be required in order to use the Ecom backup router. The failure recovery plan is currently being specified by FOS, EDOS, and Ecom representatives and will be completed prior to FOS CDR. This RID Response has been coordinated with the RID Originator.

Status **Closed** **Date Closed** **2/1/95** **Sponsor** **Johns**

****** **Attachment if any** ******